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CITY OF SIERRA MADRE, CALIFORNIA

NOISE ELEMENT

OF THE

GENERAL PLAN

JULY, 1975

Prepared by

PLANNING DEPARTMENT
CITY OF SIERRA MADRE



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INTRODUCTION

The Noise Element of the General Plan identifies community standards, goals and objectives. The Noise Element is related and interdependent on the land use, circulation, and transportation elements of the General Plan adopted October, 1972.

This element presents noise levels associated with major transportation facilities as they relate to the requirements of the Government Code, Section 65302(g), which states:

"A noise element in quantitative, numerical terms, showing contours of present and projected noise levels associated with all existing and proposed major transportation elements. These include but are not limited to the following:

- (1) Highways and freeways.
- (2) Ground rapid transit systems.
- (3) Ground facilities associated with all airports operating under a permit from the State Department of Aeronautics.

These noise contours may be expressed in any standard acoustical scale which includes both the magnitude to noise and frequency of its occurrence. The recommended scale is sound level A, as measured with A-weighting network of a standard sound level meter, with corrections added for the time duration per event and the total number of events per 24-hour period.

Noise contours shall be shown in minimum increments of five decibels and shall be continued down to 65 dB(A). For regions involving hospitals, rest homes, long-term medical or mental care, or outdoor recreational areas, the contours shall be continued down to 45 dB(A).

Conclusions regarding appropriate site or route selection alternatives or noise impact upon compatible land uses shall be included in the general plan.

GOALS

The scope of the Noise Element is a general policy statement of the environmental noise problems as they relate to transportation and the residential quality of Sierra Madre. The health and welfare of the community can be protected and promoted through the identification, control, and abatement of noise pollutants.

1. Residential

The quiet residential character of the City should be sustained relatively free from the physiological, psychological sociological, or economic effects of excessive noise from transportation or fixed source noise generators.

The City can enact noise regulations to prohibit unnecessary excessive and annoying noise sources. These controls currently relate to the general category of disturbing-the-peace nuisances.

2. Commercial-Industrial

The noise level of the commercial-industrial districts of the community should not interfere with the normal business, commercial or residential activities. Noise sources should be identified and controlled to the extent that they do not become sound levels transmitted beyond the boundaries of the district to become disruptive in the residential areas.

3. Special Land Use

Schools, hospitals, libraries, churches, and parks and recreational areas should, to the extent possible, be protected from excessive sound levels so as not to affect adversely their normal activities.

4. Transportation

Recognizing that the City may not have control over automotive noise standards due to preemption by the State, the City should require sound protection in accordance with permitted uses. The noise levels associated with transportation and general circulation patterns in Sierra Madre should be identified and controlled to insure the residential quality of the community.

GENERAL

Sound and the sensory perception of audible sounds are the result of acoustical pressure waves transmitted through some medium, in this case, air. Noise is normally defined as unwanted sound, usually annoying and disturbing. The technical aspects of sound and its

CITY OF
SIERRA MADRE
CALIFORNIA

Noise Survey Monitor

December 2, 1974
thru
December 15, 1975

GRAPHIC SCALE
0 100 200 300 400 500 600 700 800 900 1000

400' 100' 200' 300' 400' 500' 600' 700' 800' 900' 1000'

IMPLEMENTATION

The survey and noise element should serve as guidelines to the implementation of any noise policies of the City of Sierra Madre. It is recommended that:

- (1) Strict enforcement of noise standards of the Motor Vehicle Code be observed.
- (2) Review community activities to assure minimization of noise generated by City function and construction.
- (3) Consider and review existing noise related ordinances and evaluate their effectiveness.
- (4) Develop a public awareness program as to noise levels and their effects on the community.
- (5) Review related elements of the General Plan for recognition of land use and its effect on the noise environment.

APPENDIX

GLOSSARY

A-WEIGHTED NETWORK

The ear does not respond equally to frequencies, but is less efficient at low and high frequencies than it is at medium or speech range frequencies. Thus, to obtain a single number representing the sound level of a noise containing a wide range of frequencies in a manner representative of the ears' response, it is necessary to reduce, or weight, the effects of the low and high frequencies with respect to the medium frequencies. The resultant sound level is said to be A-weighted, and the units are dBA.

AMBIENT NOISE

The total of all noise in a system or situation, independent of the presence of the desired signal. In acoustical measurements, strictly speaking, the term "background noise" means electrical noise in the measurement system. However, in popular usage the term "background noise" is also used with the same meaning as "residual noise."

DAY-NIGHT AVERAGE-SOUND LEVEL

The L_{dn} is a scale equivalent to the CNEL with the exception that the evening period is deleted and all occurrences during 7:00 P.M. and 10:00 P.M. are included in the daytime period.

DECIBEL

The decibel (dB) is a measure, on a logarithmic scale, of the magnitude of a particular quantity (such as sound pressure, sound power, intensity), with respect to a standard reference value (0.0002 microbar for sound pressure and 10^{-12} watt for sound power).

FREQUENCY

The frequency of a function periodic in time shall mean the reciprocal of the primitive period. The unit is the cycle per unit time or Hertz shall be specified.

NOISE

Any sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying.

NOISE SURVEY

Location MEMORIAL PARK

Time 9:30 P.M.

Date Dec. 11, '79

Temp. 55°

Monitor Mode _____

Name _____

Ambient Noise Level _____

100 dBA

80 dBA

60 dBA

40 dBA

20 dBA

POINTS

No. 1521-9428

Comments _____

NOISE SURVEY

Location SIERRA MADRE BLVD AND HERMOSA

Time 6:15 A.M.

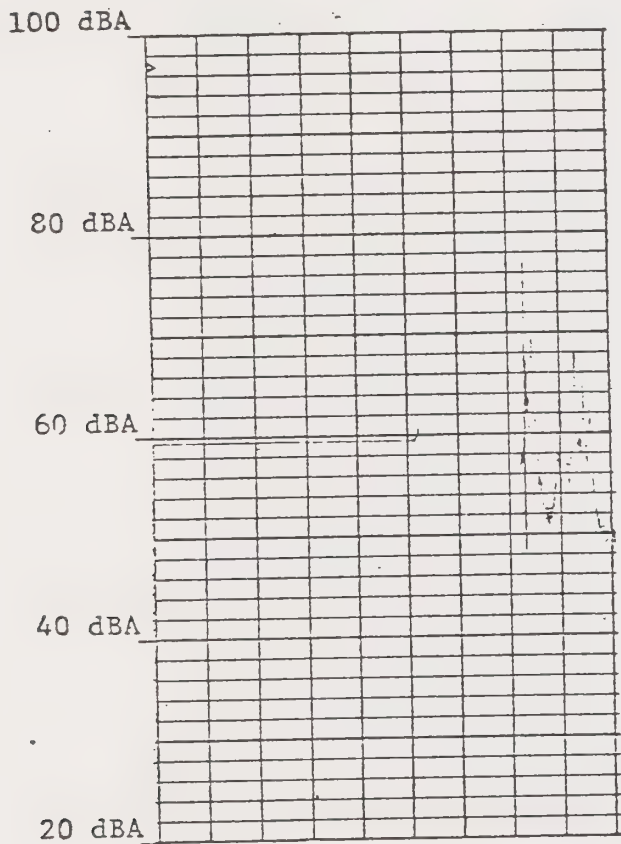
Date DEC 5 '74

Temp. 48° clear, crisp & Dawn

Monitor Mode _____

Name _____

Ambient Noise Level _____



RECORDING CHARTS GRAPHIC CONTROL

Comments _____

NOISE SURVEY

Location SIERRA MADRE BLVD AND HERMOSA

Time 8:10 A.M.

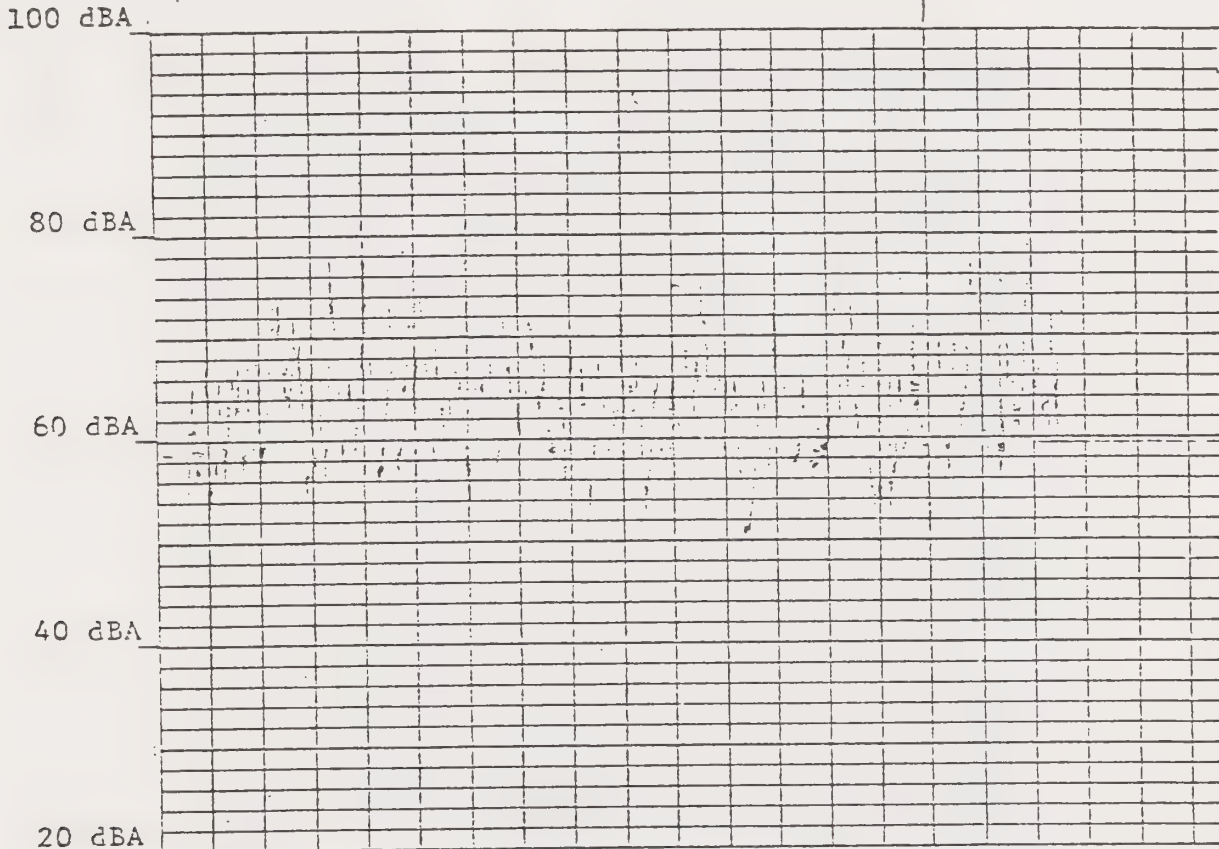
Date DEC 4, '74

Temp. 59°F

Monitor Mode _____

Name _____

Ambient Noise Level _____



LABORATION BUFFALO, NEW YORK

Comments _____

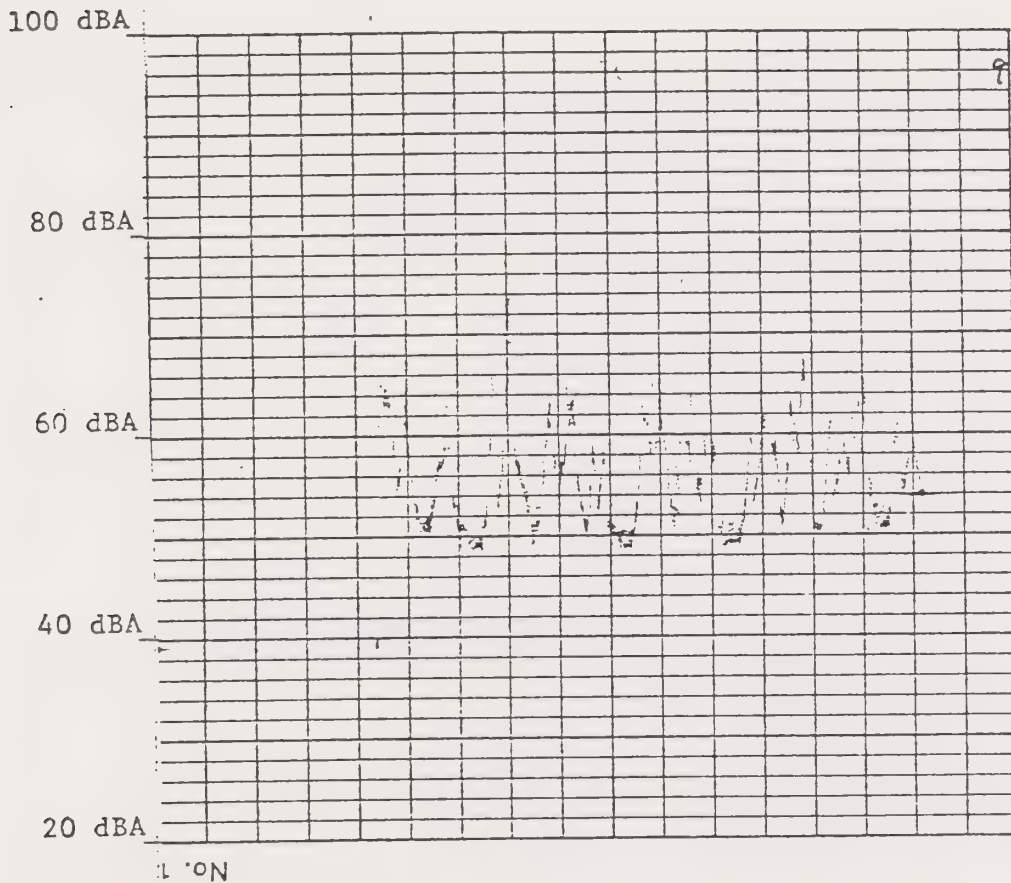
NOISE SURVEY

Location SIERRA MADRE BLVD. AND HERMOSA

Time 9:00 P.M. Date DEC 11, '74 Temp. 55°

Monitor Mode _____ Name _____

Ambient Noise Level _____



Comments _____

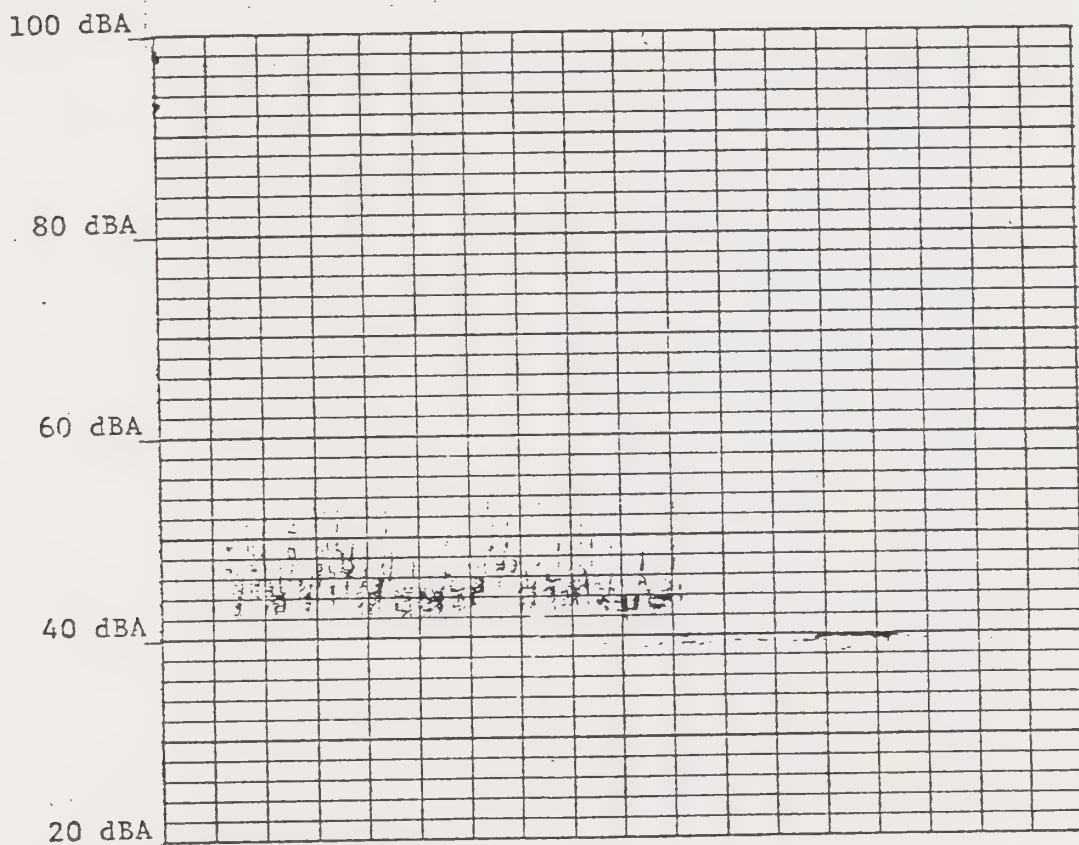
NOISE SURVEY

Location HERMOSA

Time 9:20 P.M. Date Dec. 11, '79 Temp. 55°

Monitor Mode _____ Name _____

Ambient Noise Level _____



RECORDING CHARTS

8112

Comments _____

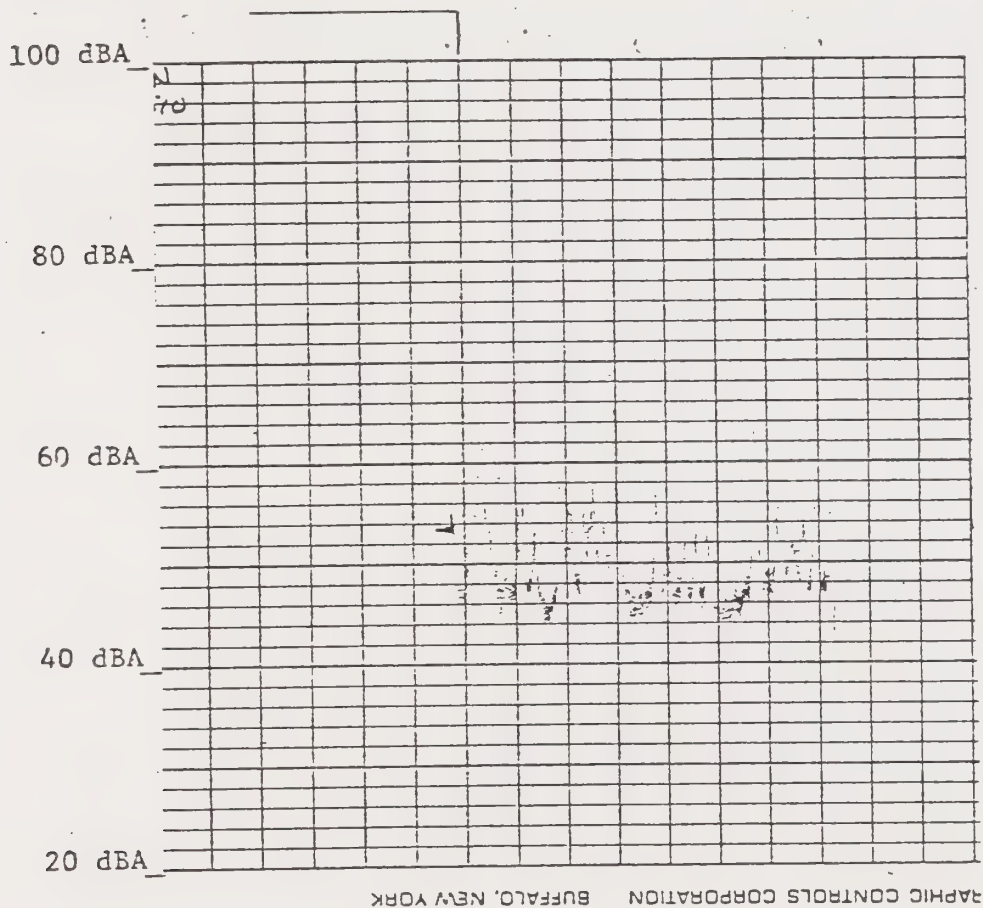
NOISE SURVEY

Location HERMOSA

Time 9:10 p.m. Date Dec 11, 79 Temp. 55°

Monitor Mode _____ Name _____

Ambient Noise Level _____



Comments _____

NOISE SURVEY

Location SIERRA MADRE BLVD AND HERMOSA

Time 8:10 A.M.

Date DEC 9, '79

Temp. 59°F

Monitor Mode _____

Name _____

Ambient Noise Level _____

100 dBA

80 dBA

60 dBA

40 dBA

20 dBA

INCORPORATION BUFFALO, NEW YORK

Comments _____



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